CASE™ Thermal Writer Upgrade Instructions

2066757-001 A
7 November 2012

Introduction

This instruction sheet describes how to upgrade the CASE™ Thermal Writer hardware for CASE product codes SBW and SCF. The upgrade will be from the Thermal Writer I (C-Scan writer) hardware (including 2005484-001 writer) to the Thermal Writer II (Sanmina writer) hardware (including 2051637-001 writer). This update kit contains the necessary hardware and software components to make the writer functionally equivalent to the CASE R3X product code.

Please carefully read all of the following notes prior to starting the upgrade process.

NOTE:
In addition to ordering the thermal writer upgrade kit (P/N 2060799-001), the following part needs to be ordered separately:

The Keypad label of the proper language must be ordered ("Language Specific Keypad Label (P/N 2066797-0XX)" on page 2).

NOTE:
Floppy, multi-media, CD/DVD, and hard drives are not upgraded in this process.

NOTE:
The old Thermal Writer I (C-Scan writer) when removed from the CASE device should be retained for return to GE as detailed in the section below, titled: "Return of Old Thermal Writer I (C-Scan Writer)" on page 12.

NOTE:
After unpacking the FRU upgrade kit, keep the box for the writer along with its foam inserts. In addition, keep any bubble wrap or packing filler material that will be helpful in packing the old Thermal Writer I (C-Scan writer) for return to GE. See section below, titled: "Return of Old Thermal Writer I (C-Scan Writer)" on page 12.

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CASE Thermal Writer Upgrade Kit (P/N 2060799-001)

In addition to this instruction sheet check that the following items are in the kit you received. If they are not, contact Technical Support at 1-800-558-7044 (U.S.).

CASE Thermal Writer Upgrade kit (P/N 2060799-001)

Description	Part Number	Quantity
COVER WORKSURFACE CASE	2042505-001	1
PCB POWER DISTRIBUTION CASE	2044718-001	1
TRAY WRITER CASE	2058461-001	1
PWR SPLY SW MEDICAL 75W 24V	2039749-001	1
PRINTER THERMAL CASE	2051637-001	1
CABLE USB TYPE A TO B 1.5M	2044790-001	1
CORE FERRITE CLAMP-ON WIDEBAND 200@100M	2046477-001	1
WSHR FLT RBR ID.17 OD.375 – THK.093 A50-70	2047324-001	4
NAMEPLATE 40MM GE LOGO	2007786-009	1
LABEL BIOS SETUP CASE P2	2006538-001	1
KIT UPGRADE SOFTWARE CASE V6.5	2001306-005	1
LABEL CARTION FRU	422159-101	1
ADH INSTANT LOCTITE 401 HZ	6016-0000-066	1
DOC MSDS LOCTITE 40140 INSTANT ADHESIVE	2069404-001	1

Language Specific Keypad Label (P/N 2066797-0XX)

The language specific stress keypad label needs to be ordered separately, please see the list below to ensure the correct language stress keypad label is ordered.

Part Number	Description
2066797-001	FRU KEYPAD LABEL ENGLISH CASE SERIES
2066797-002	FRU KEYPAD LABEL GERMAN CASE SERIES
2066797-003	FRU KEYPAD LABEL FRENCH CASE SERIES
2066797-004	FRU KEYPAD LABEL SWEDISH CASE SERIES
2066797-005	FRU KEYPAD LABEL SPANISH CASE SERIES
2066797-006	FRU KEYPAD LABEL ITALIAN CASE SERIES

Part Number	Description
2066797-007	FRU KEYPAD LABEL DUTCH CASE SERIES
2066797-008	FRU KEYPAD LABEL RUSSIAN CASE SERIES
2066797-009	FRU KEYPAD LABEL CHINESE CASE SERIES
2066797-010	FRU KEYPAD LABEL JAPANESE CASE SERIES
2066797-011	FRU KEYPAD LABEL NORWEGIAN CASE SERIES
2066797-012	FRU KEYPAD LABEL DANISH CASE SERIES
2066797-013	FRU KEYPAD LABEL HUNGARIAN CASE SERIES
2066797-014	FRU KEYPAD LABEL CZECH CASE SERIES
2066797-015	FRU KEYPAD LABEL POLISH CASE SERIES
2066797-016	FRU KEYPAD LABEL PORTUGUESE CASE SERIES
2066797-017	FRU KEYPAD LABEL TURKISH CASE SERIES
2066797-018	FRU KEYPAD LABEL KOREAN CASE SERIES
2066797-019	FRU KEYPAD LABEL FINNISH CASE SERIES

Update CASE Application Software Version (if necessary)

Verify that the CASE software is currently at version 6.51 or later. If the CASE software is not at version 6.51 or later, an upgrade to the CASE software version will need to be completed prior to updating the hardware. The CASE software update to version 6.51 is to be performed according to the *2000656-041 CASE Exercise Testing System Upgrade Instructions* which is provided with this writer upgrade kit (software upgrade kit part number 2001306-005).

Thermal Writer I Part Removal Procedure

Follow these steps to remove the necessary CASE hardware:

1. Log off the CASE application, shutdown the system, turn the power switch to OFF, and unplug the unit from the power outlet.
2. Disconnect the keyboard and the mouse connectors from the I/O drawer and pull the cable through the cable guide and remove.
3. Disconnect the ground wire on the writer door.

4. Remove the 12 mounting screws from under the WORKSURFACE CASE (2003089-001) as shown in Figure A.

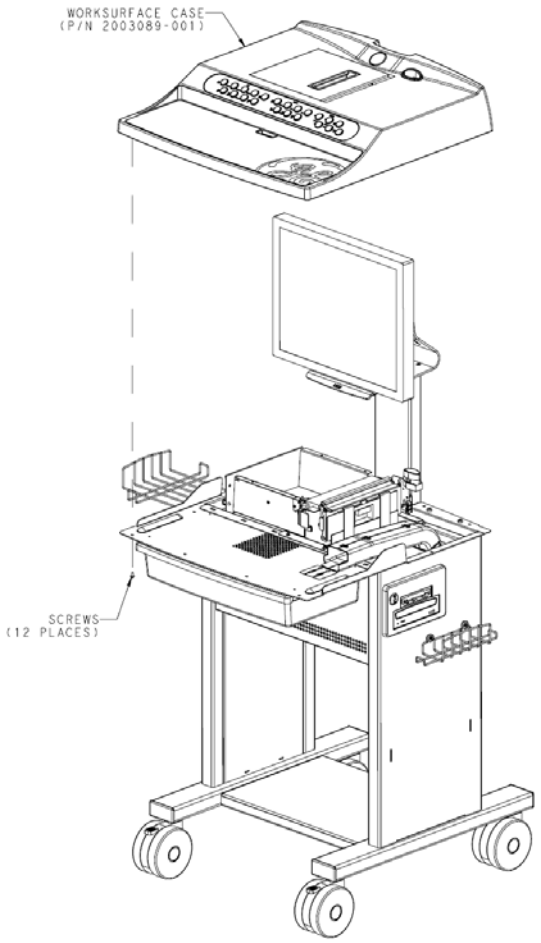


Figure A. CASE Worksurface Removal

5. Lift the WORKSURFACE CASE (2003089-001) up from the front.
6. While holding the front of the WORKSURFACE CASE (2003089-001) up, reach underneath and carefully disconnect the two keypad cables located near the left of the keypad assembly.
7. Lift off the WORKSURFACE CASE (2003089-001).
8. The BUTTON WRITER RELEASE (2004417-001) will most likely fall when the WORKSURFACE CASE (2003089-001) is removed.

9. Remove the stress keypad label (label around all of the buttons), remove the stress keypad (refer to the *CASE Service Manual*), the panel access cable, and pad worksurface from the WORKSURFACE CASE (2003089-001) as shown in Figure B.

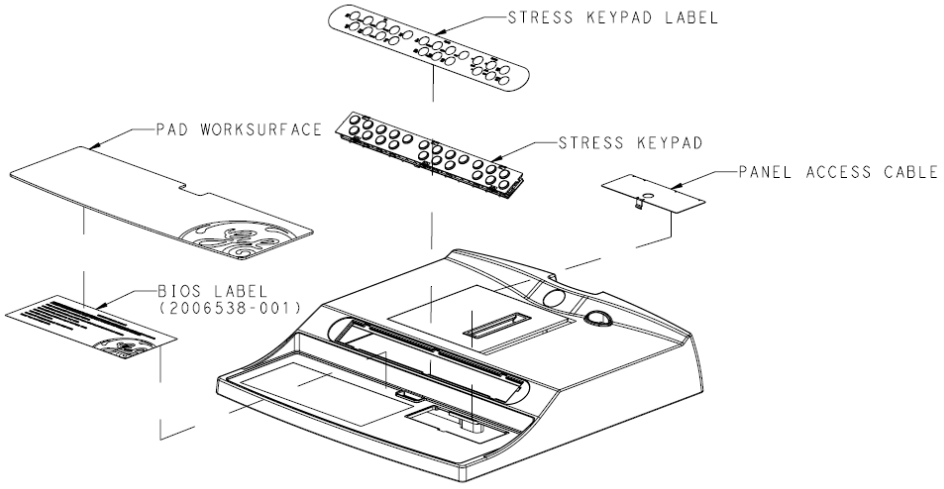


Figure B. CASE Keypad Removal

10. Remove the two front lock nuts and loosen the two rear screws holding the writer tray in place.

    This will allow the ASSY THERMAL WRITER CASE SERIES (2005484-001) and TRAY WRITER CASE (2004296-001) to be removed as one. See Figure C.

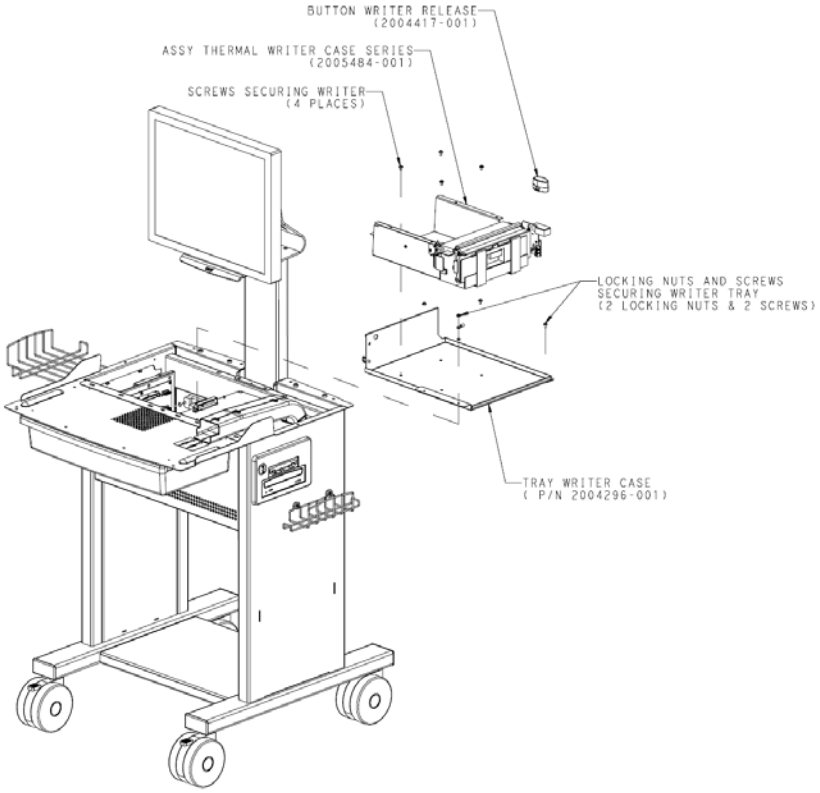


Figure C. CASE Thermal Writer and Tray Removal

11. Loosen the two lock nuts holding the power distribution assembly in place, see Figure D.

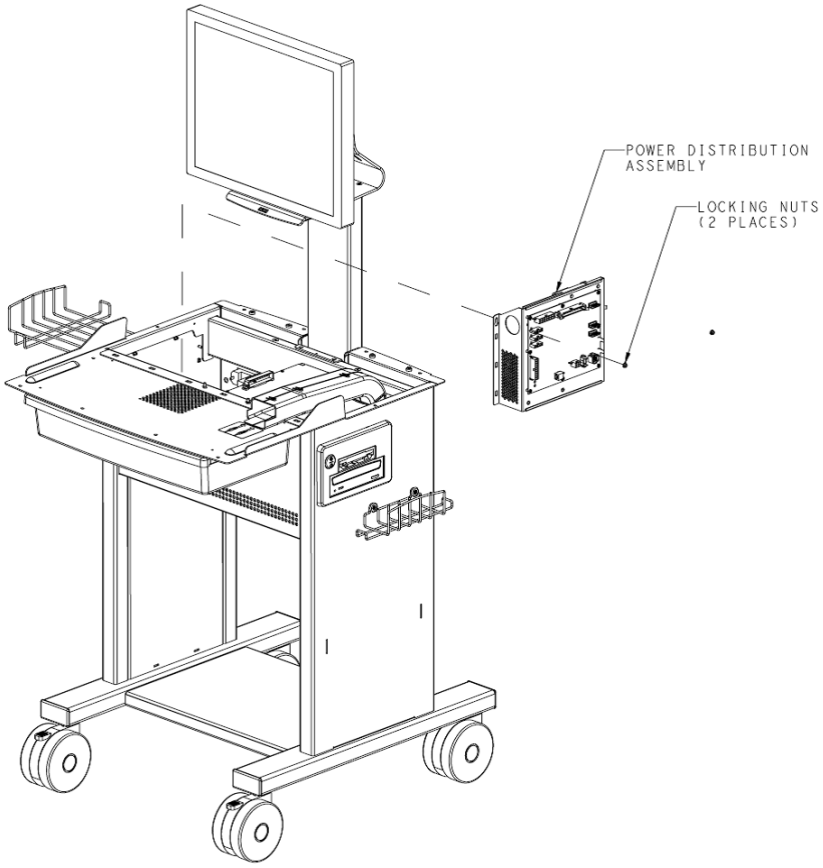


Figure D. CASE Power Distribution Assembly Removal

12. Disconnect the cables that are connected to the power distribution assembly. Carefully lift the assembly out for service.

13. Remove the 3 cables and screws holding the PCB CASE 4000 USB WRITER (2004064-001) and the POWER SUPPLY SWIT 75W-15V (420025-003) to the power distribution assembly bracket, see Figure E.

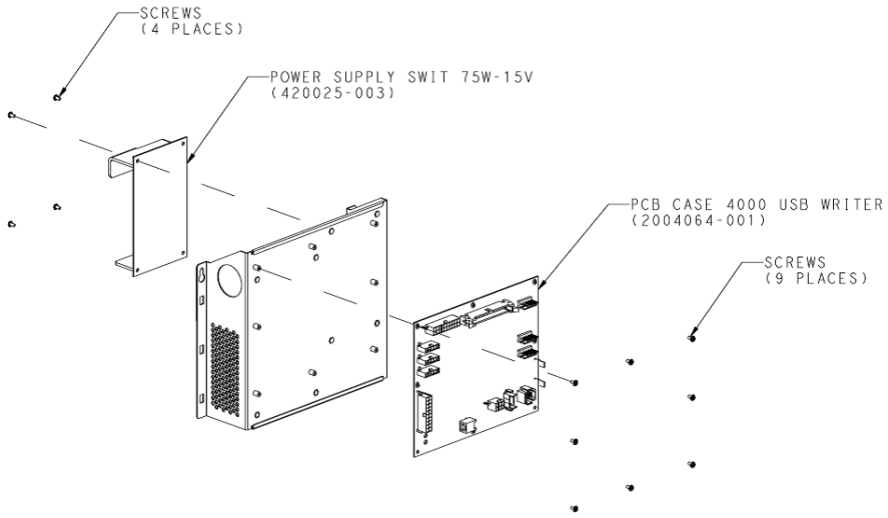


Figure E. CASE Power Control Board and Power Supply Removal

14. Remove the old thermal writer ribbon cable (2004980-001). This ribbon cable is no longer needed for the new thermal writer II.

Thermal Writer II Part Installation Procedure

Follow these steps to install the necessary new hardware into the CASE cart:

1. Make sure the CASE power switch is in the OFF position and the unit is unplugged from the power outlet.
2. Attach the new PCB POWER DISTRIBUTION CASE (2044718-001) and PWR SPLY SW MEDICAL 75W 24V (2039749-001) to the power supply assembly bracket using the screws previously used in the same locations as their predecessors.

3. Add the CORE FERRITE CLAMP-ON (2046477-001) onto HARN LIGHT INTERNAL CASE (2004972-001) as shown in Figure F. below.

   This should be approximately 1 inch away from the connection to the PCB POWER DISTRIBUTION CASE (2044718-001) on the side that connects to the stress keypad.

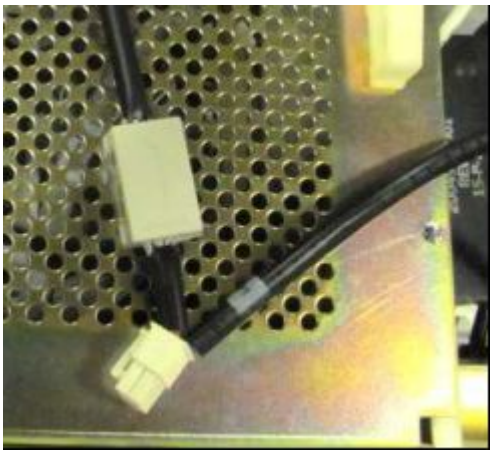
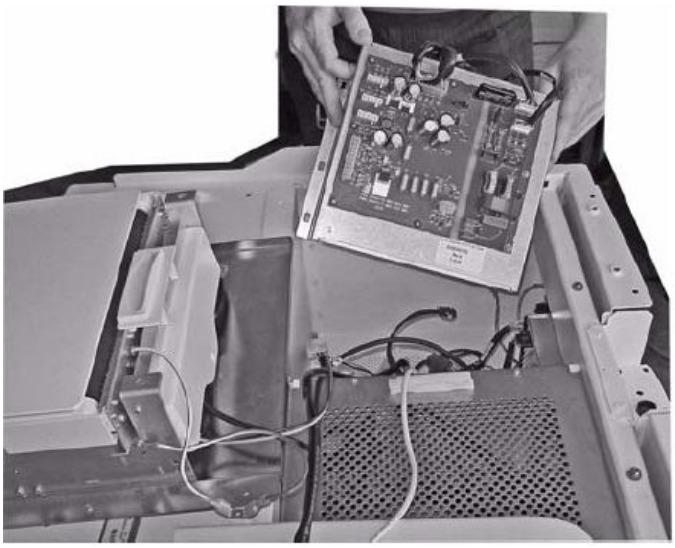


Figure F. Install CORE FERRITE CLAMP-ON

4. Reconnect all the appropriate cables, insert power distribution assembly back into the CASE cart, and secure with the two lock nuts that were initially loosened for the power distribution assembly removal.

   NOTE:

   Special care must be taken so cable 2004977-001 is plugged into J10 of the new 2044718-001 board and that cable 2004977-002 is plugged into J9 of the 2044718-001 board. If these two are not connected to the correct J connection, the unit will not power ON or power OFF correctly during the functional checkout testing.



5. The keypad USB connection will now require the CABLE USB TYPE A TO B 1.5M (2044790-001) instead of the original one.

   Remove the old keypad USB cable and install the new keypad USB cable (2044790-001) following the original routing and connection point to motherboard.

6. Connect the writer power plug from the new writer to PCB POWER DISTRIBUTION CASE (2044718-001).

7. Install WELDMENT CASE THERMAL PRINTER TRAY (2042504-001) and PRINTER THERMAL CASE (2051637-001).

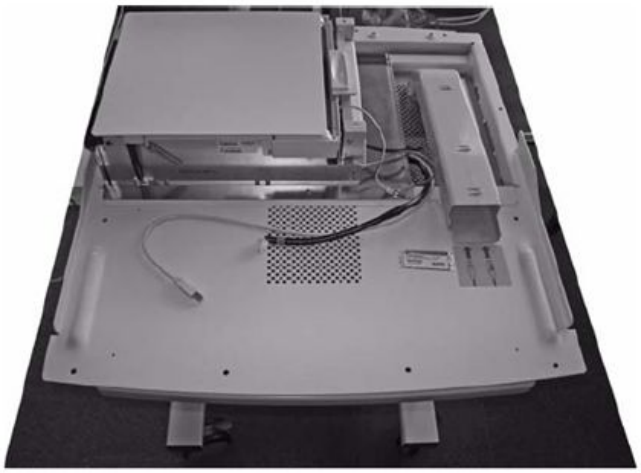
   NOTE:

   The mounting hardware (4 screws) is the same that was used for the original writer.

8. Connect the writer power plug to PCB POWER DISTRIBUTION CASE (2044718-001).

9. Install the WELDMENT CASE THERMAL PRINTER TRAY (2042504-001) and the PRINTER THERMAL CASE (2051637-001).

   The mounting hardware is the same as previously used. See the following picture for proper mounting of the Thermal Writer II and the proper cable routing.



10. Install the stress keypad into COVER WORKSURFACE CASE (2042505-004) and apply the new stress keypad label (not included in kit, must be ordered separately due to language options).

11. Four 2047324-001 rubber washers are installed as shown the figure that follows.

    The 4 washers are glued to 4 worksurface plastic bosses as shown. The purpose of these washers is to shim the cover upward so that the writer door will open freely and so the writer door surface is roughly level with the worksurface. The use of these washers can be omitted if no such problems exist.

    Use the Adhesive LOCTITE 401, GE P/N 6016-0000-066 to glue the rubber washers to the plastic bosses.

12. Position the COVER WORKSURFACE CASE (2042505-004) and make the necessary connections to the stress keypad.

    The USB connection will now require the CABLE USB TYPE A TO B 1.5M (2044790-001) instead of the original one, follow the original for routing and the connection point to the motherboard.

    Secure the COVER WORKSURFACE CASE with the original 12 screws.

13. Install LABEL BIOS SETUP CASE (2006538-001) and NAMEPLATE 40MM GE LOGO (2007786-009) onto the worksurface.
14. Install the pad worksurface and access panel cable.
15. Perform the function checkout per the *CASE Service Manual*.
16. Perform the electrical safety test per the *CASE Service Manual*.

Return of Old Thermal Writer I (C-Scan Writer)

Please package the old Thermal Writer I (C-Scan writer) into the writer box along with its two foam inserts. In addition cut to size and use any bubble wrap or packing filler material to protect this FRAGILE writer assembly during shipment. Make sure the writer side gear assemblies have adequate protection. An illustration is provided below for reference.

Once adequately packaged and sealed, please return old writer to:

GE Healthcare

Attention: Chas Austin

1701 Military Trail

Suite 150

Jupiter, FL 33458-7887, U.S.A

Publication Information

The information in this manual applies only to CASE™. Due to continuing product innovation, specifications in this manual are subject to change without notice.

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Revision History

The document part number and revision are on each page of the document. The revision identifies the document's update level. The revision history of this document is summarized in the following table.

Revision	Date	Description
A	7 November 2012	Initial release of this document.

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